FIG. 1

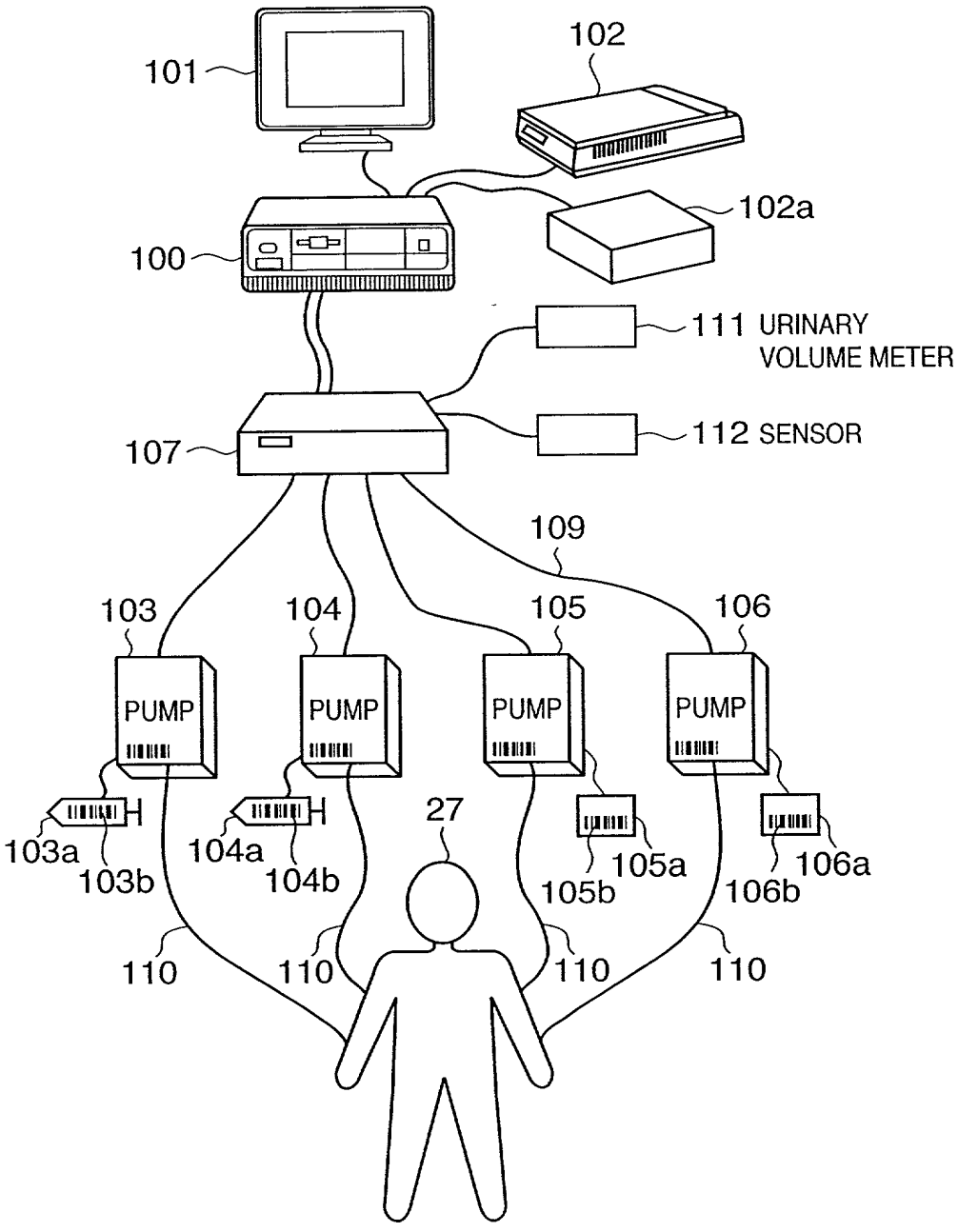

101
102
102a
100
111 URINARY VOLUME METER
107
112 SENSOR
109
103
104
105
106
PUMP
PUMP
PUMP
PUMP
103a
103b
104a
104b
27
105a
105b
106a
106b
110
110
110
110

FIG. 2

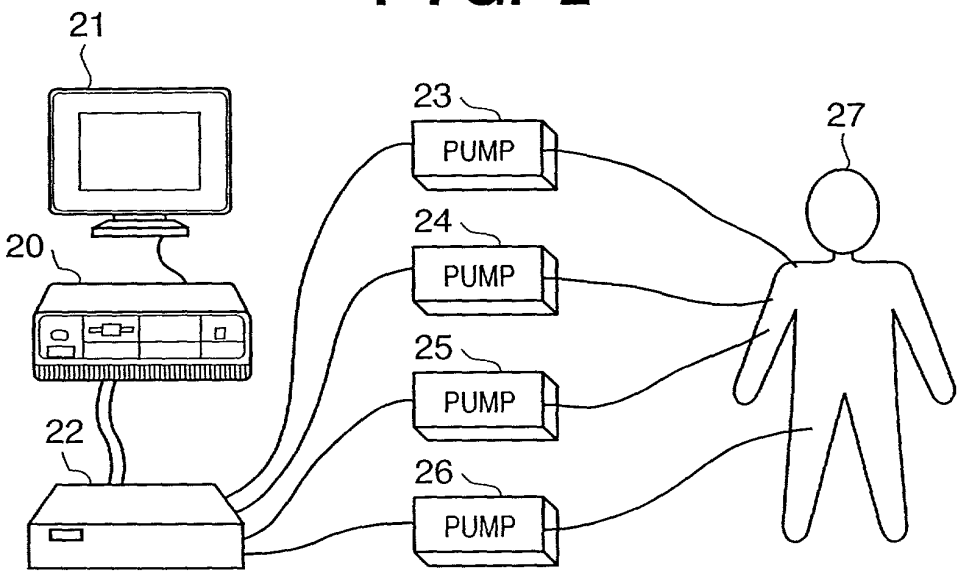


FIG. 3

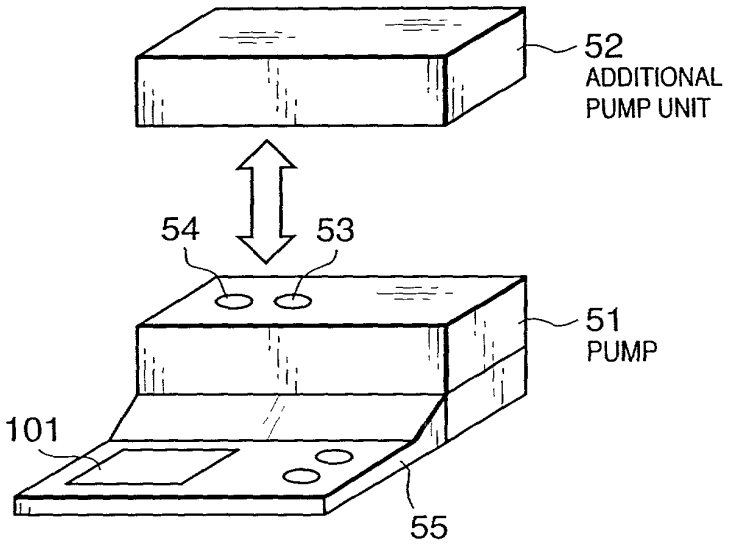


FIG. 4A

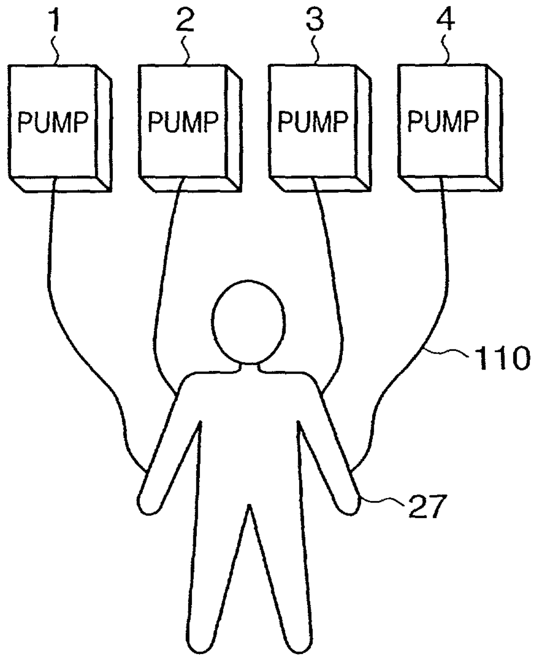


FIG. 4B

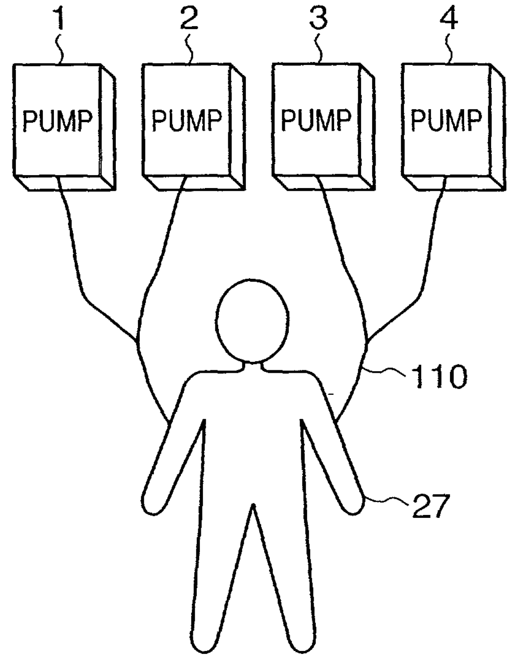


FIG. 4C

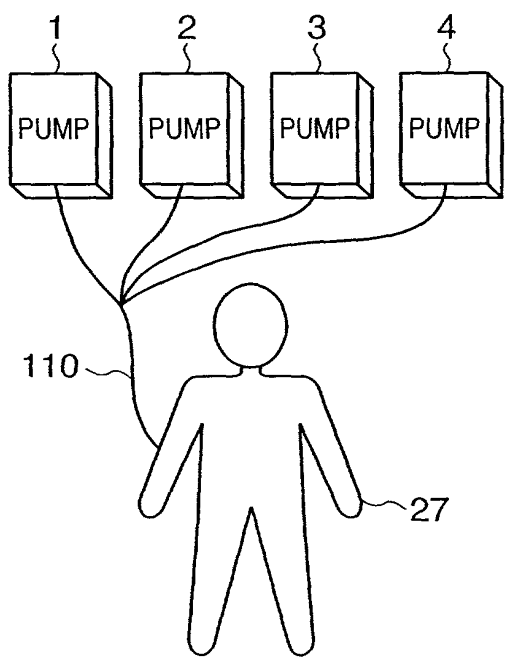
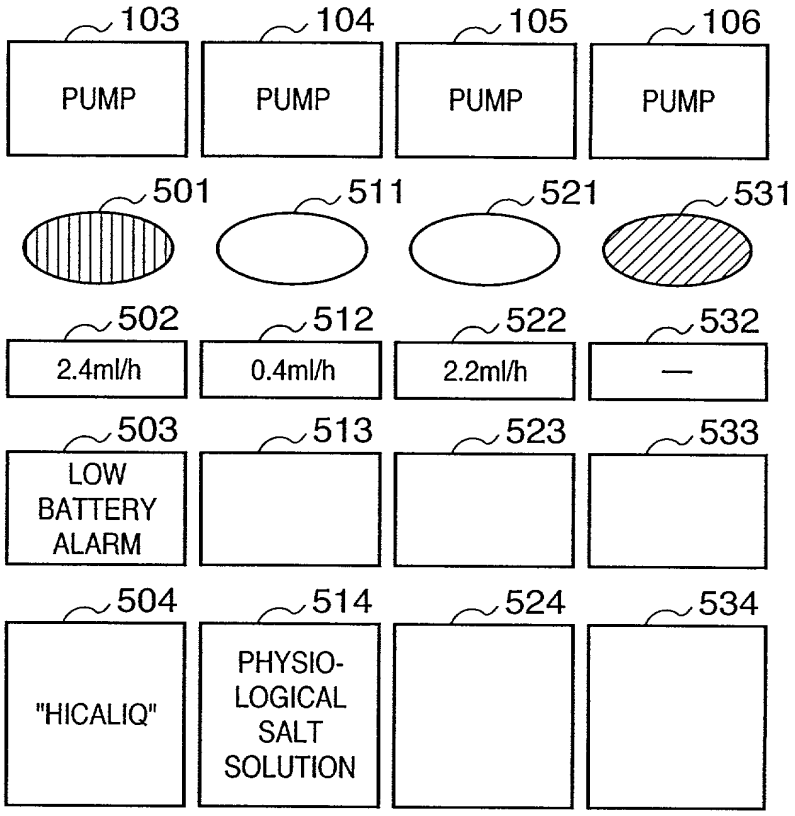


FIG. 5



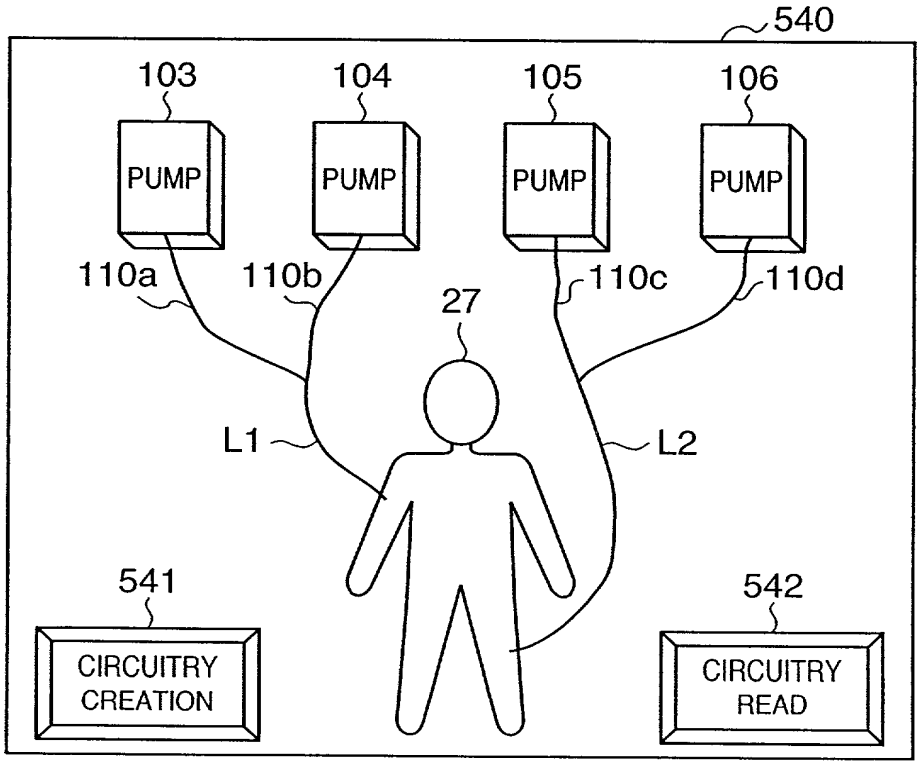


FIG. 6

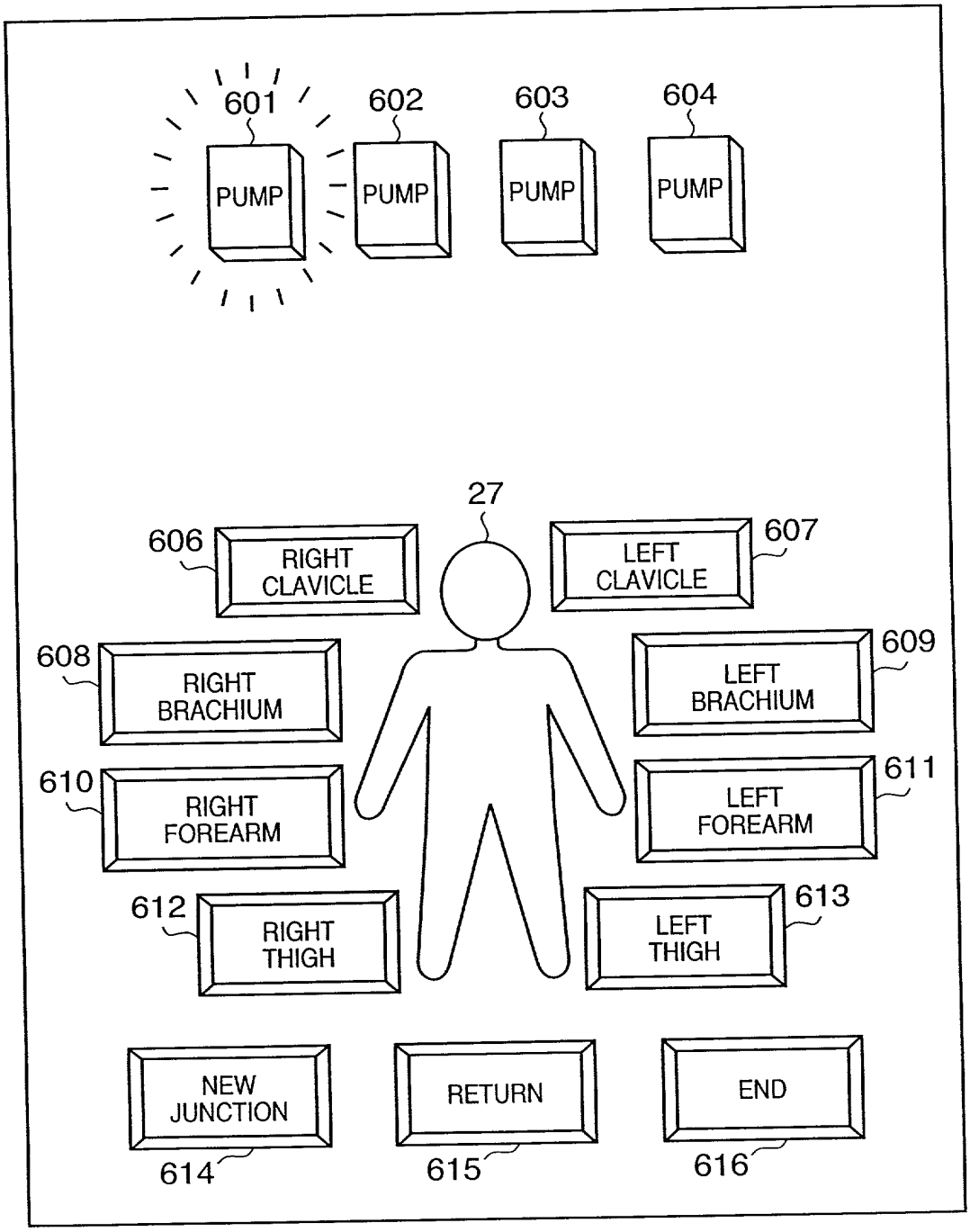

601
602
603
604
PUMP
PUMP
PUMP
PUMP
27
606
RIGHT CLAVICLE
607
LEFT CLAVICLE
608
RIGHT BRACHIUM
609
LEFT BRACHIUM
610
RIGHT FOREARM
611
LEFT FOREARM
612
RIGHT THIGH
613
LEFT THIGH
NEW JUNCTION
614
RETURN
615
END
616

FIG. 7A

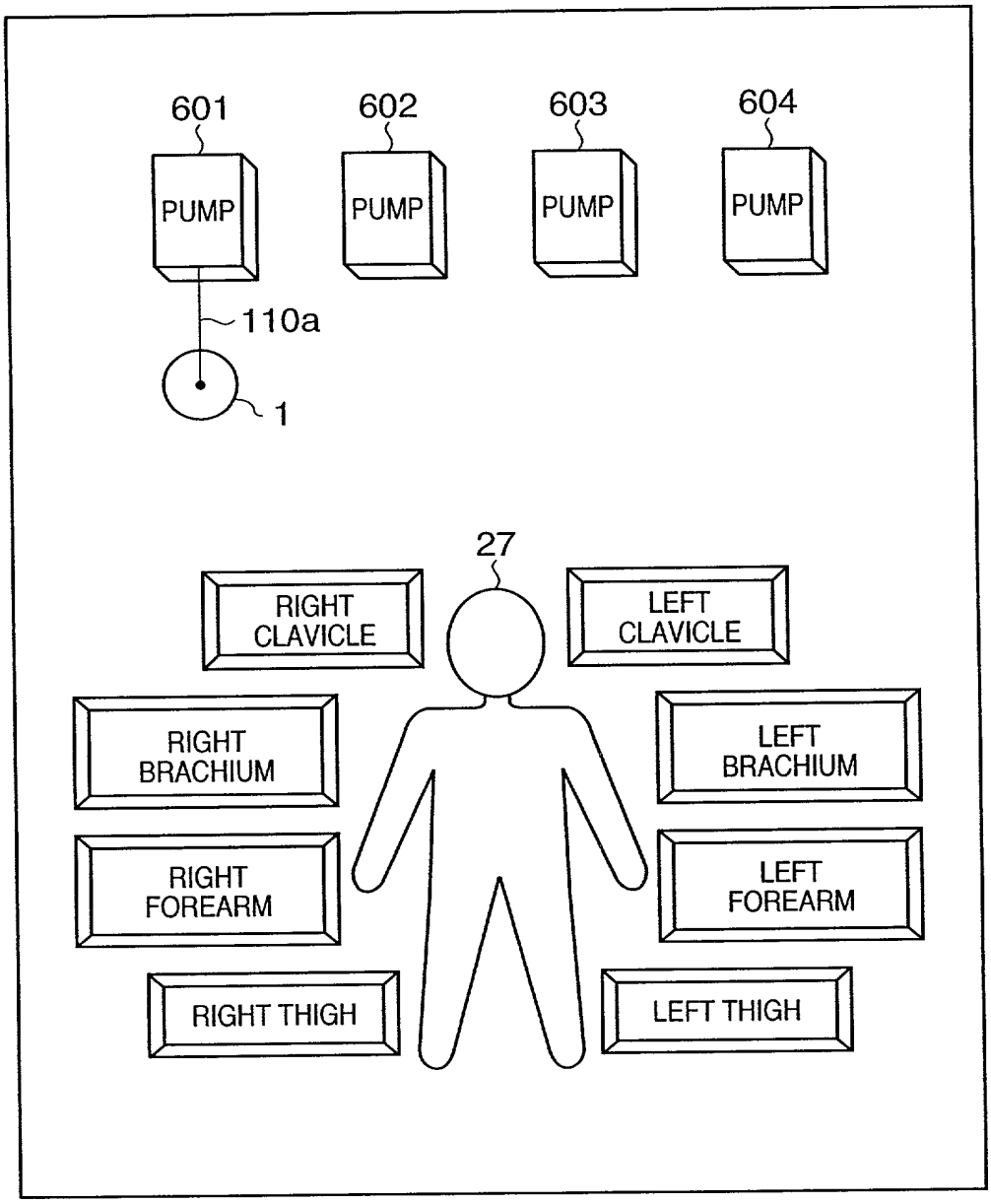


FIG. 7B

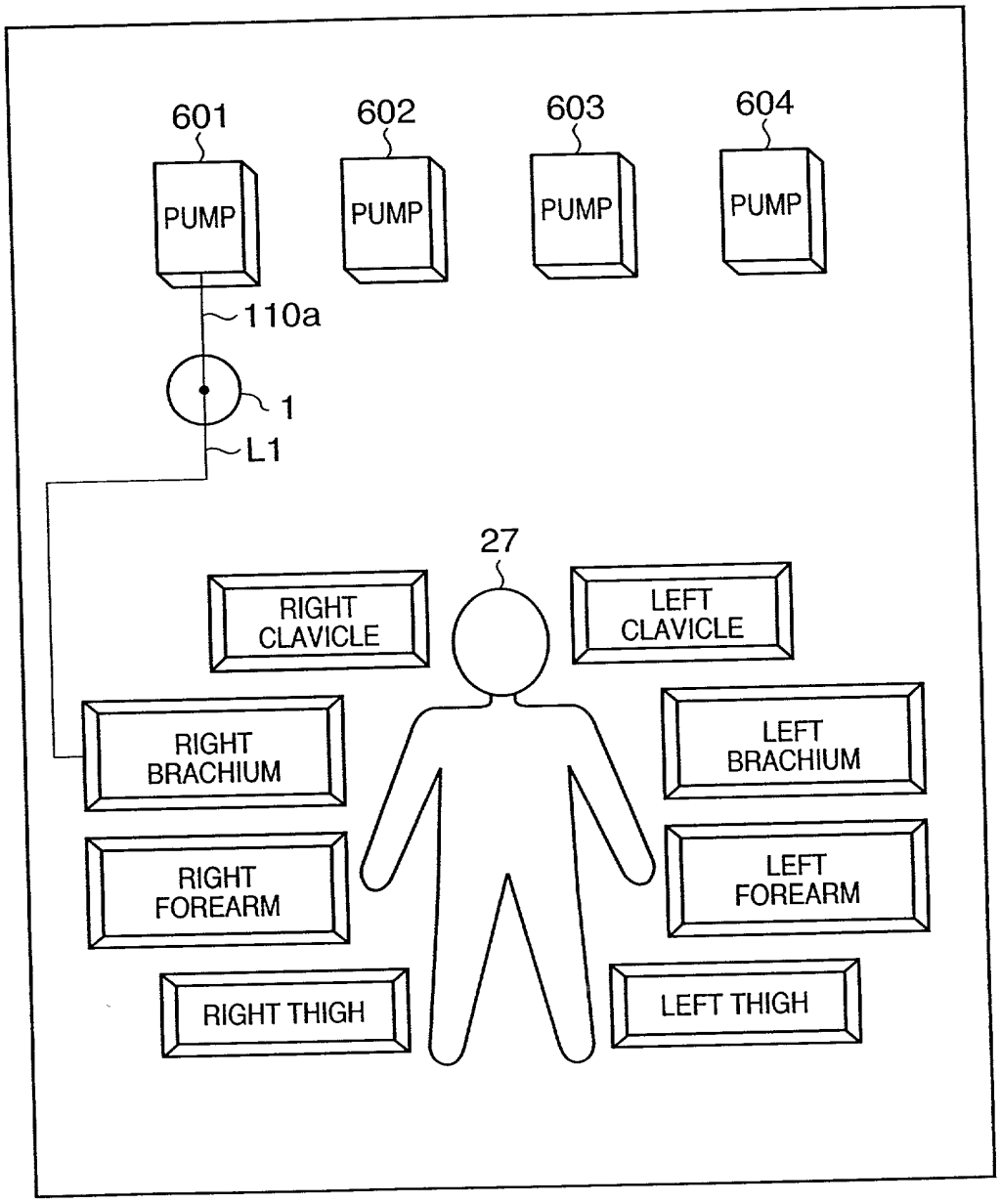

601
602
603
604
PUMP
PUMP
PUMP
PUMP
110a
1
L1
27
RIGHT CLAVICLE
LEFT CLAVICLE
RIGHT BRACHIUM
LEFT BRACHIUM
RIGHT FOREARM
LEFT FOREARM
RIGHT THIGH
LEFT THIGH

FIG. 7C

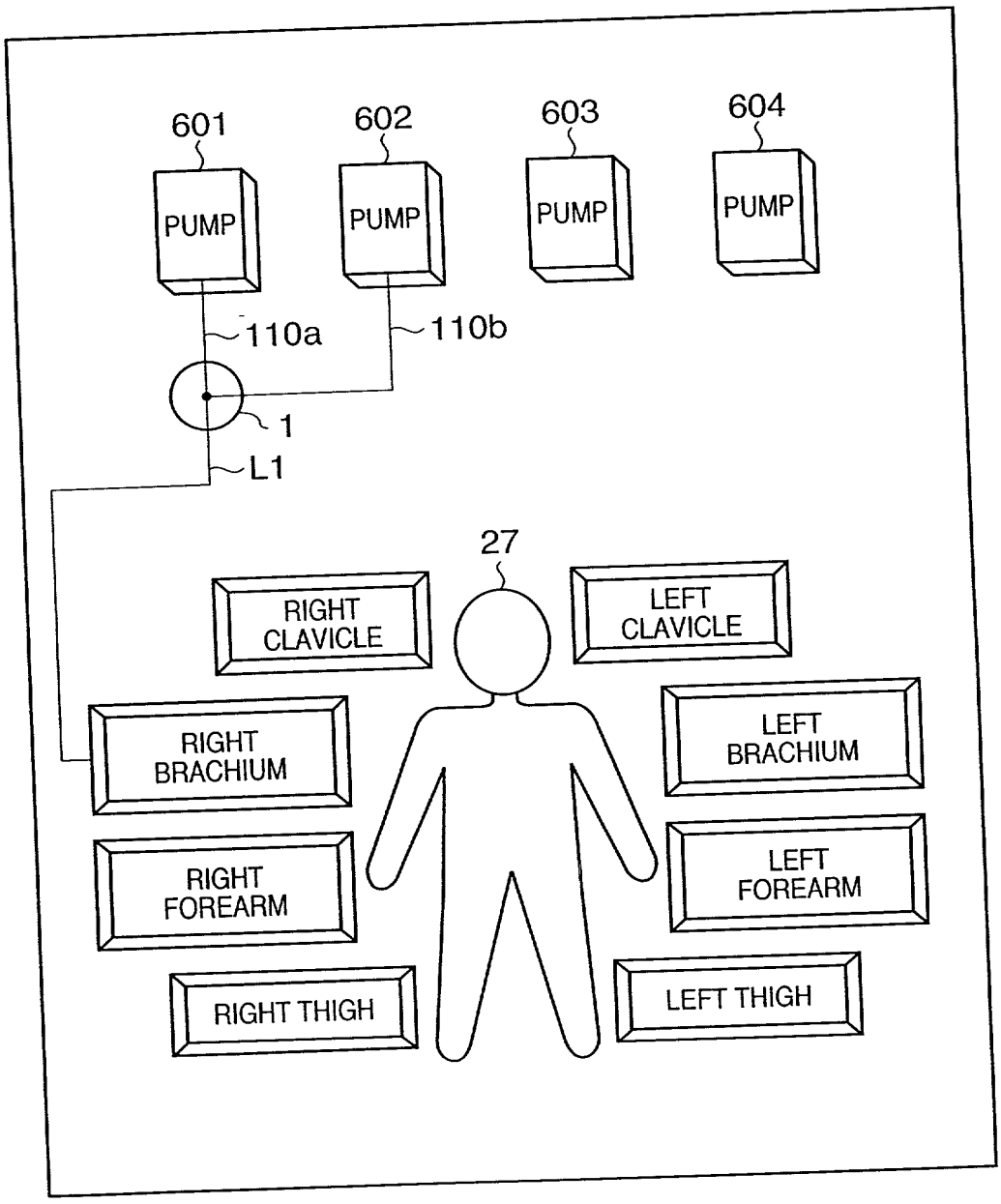

601
602
603
604
PUMP
PUMP
PUMP
PUMP
110a
110b
1
L1
27
RIGHT CLAVICLE
LEFT CLAVICLE
RIGHT BRACHIUM
LEFT BRACHIUM
RIGHT FOREARM
LEFT FOREARM
RIGHT THIGH
LEFT THIGH

FIG. 7D

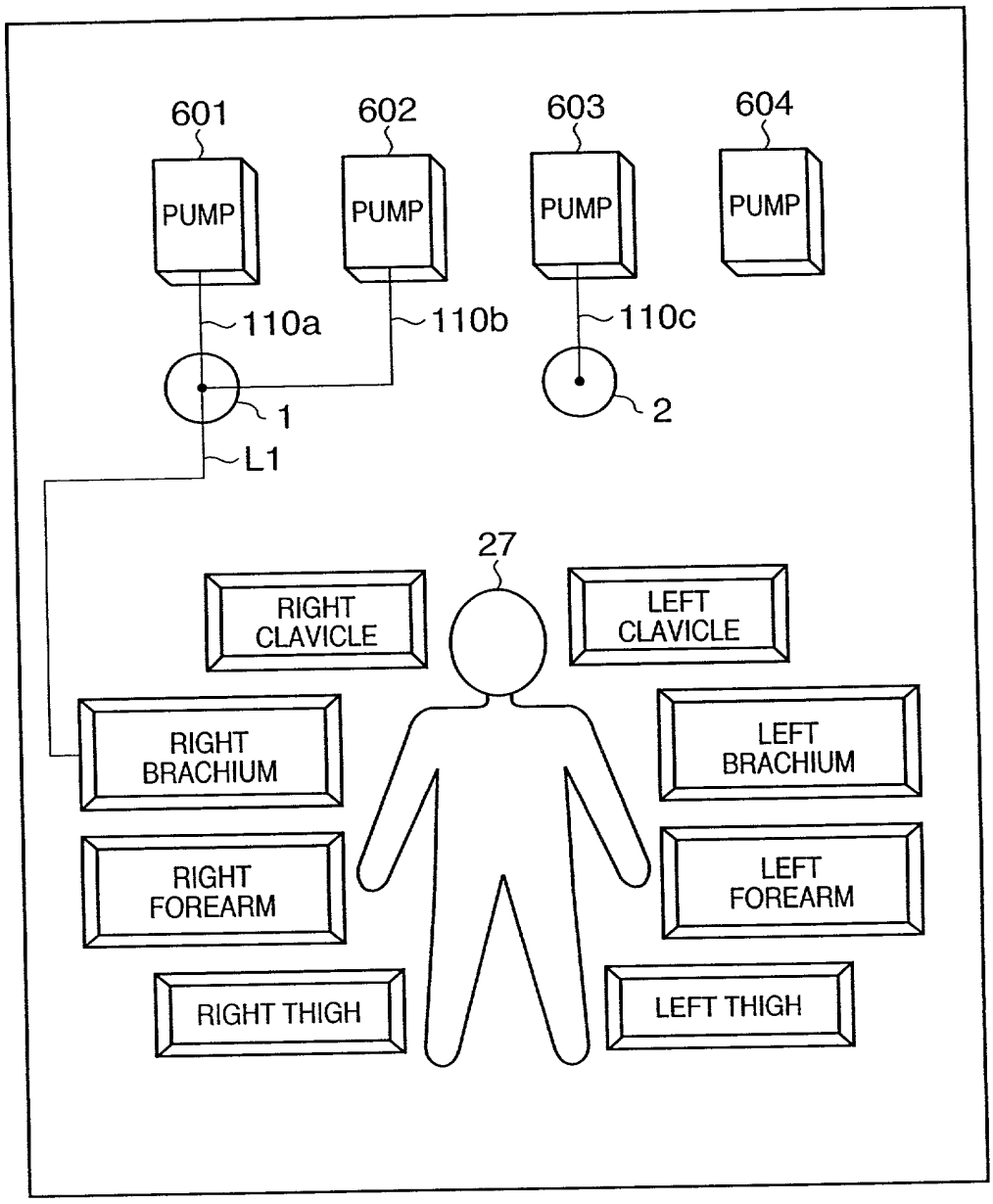

601
602
603
604
PUMP
PUMP
PUMP
PUMP
110a
110b
110c
1
2
L1
27
RIGHT CLAVICLE
LEFT CLAVICLE
RIGHT BRACHIUM
LEFT BRACHIUM
RIGHT FOREARM
LEFT FOREARM
RIGHT THIGH
LEFT THIGH

FIG. 7E

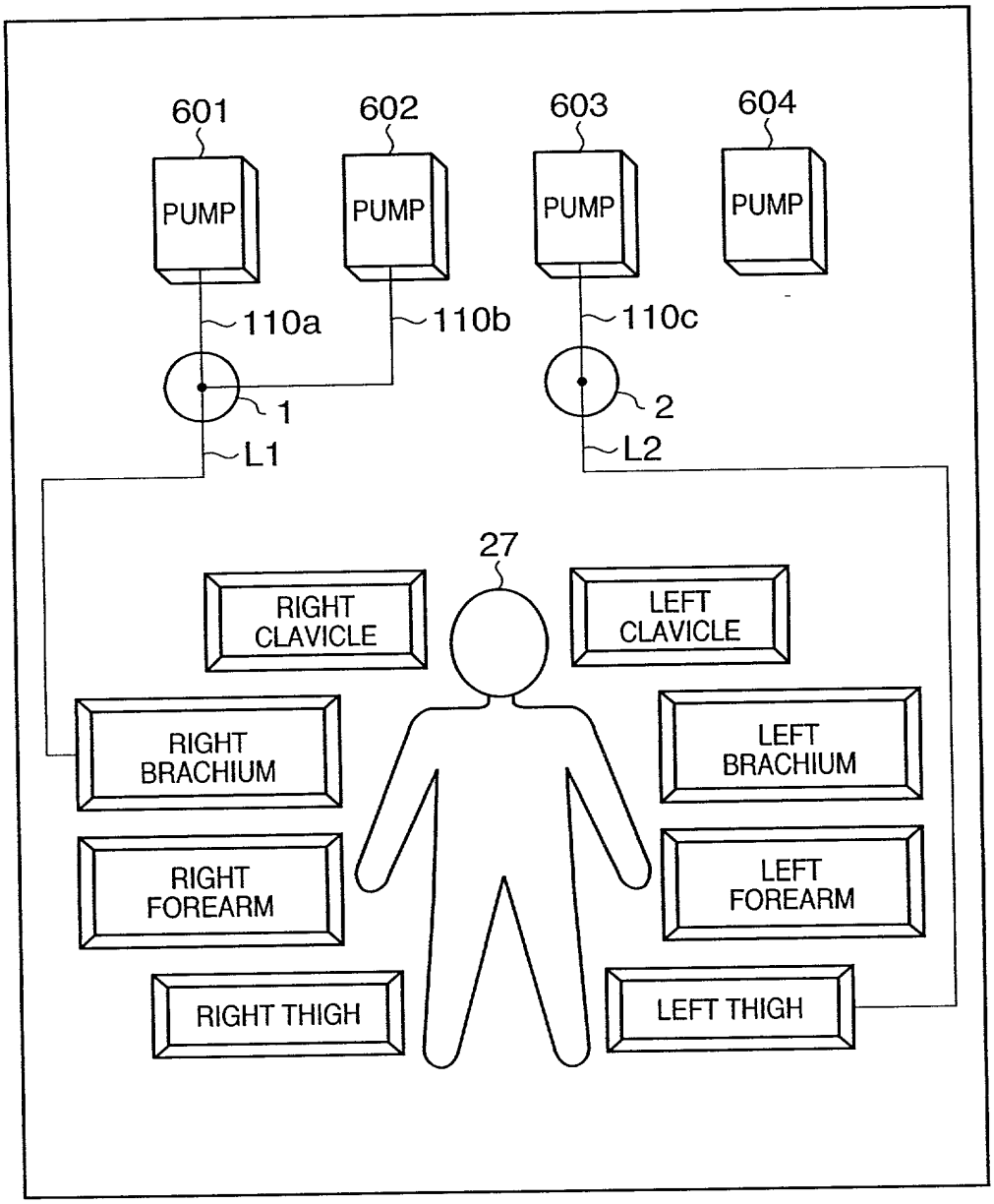

601
602
603
604
PUMP
PUMP
PUMP
PUMP
110a
110b
110c
1
2
L1
L2
27
RIGHT CLAVICLE
LEFT CLAVICLE
RIGHT BRACHIUM
LEFT BRACHIUM
RIGHT FOREARM
LEFT FOREARM
RIGHT THIGH
LEFT THIGH

FIG. 7F

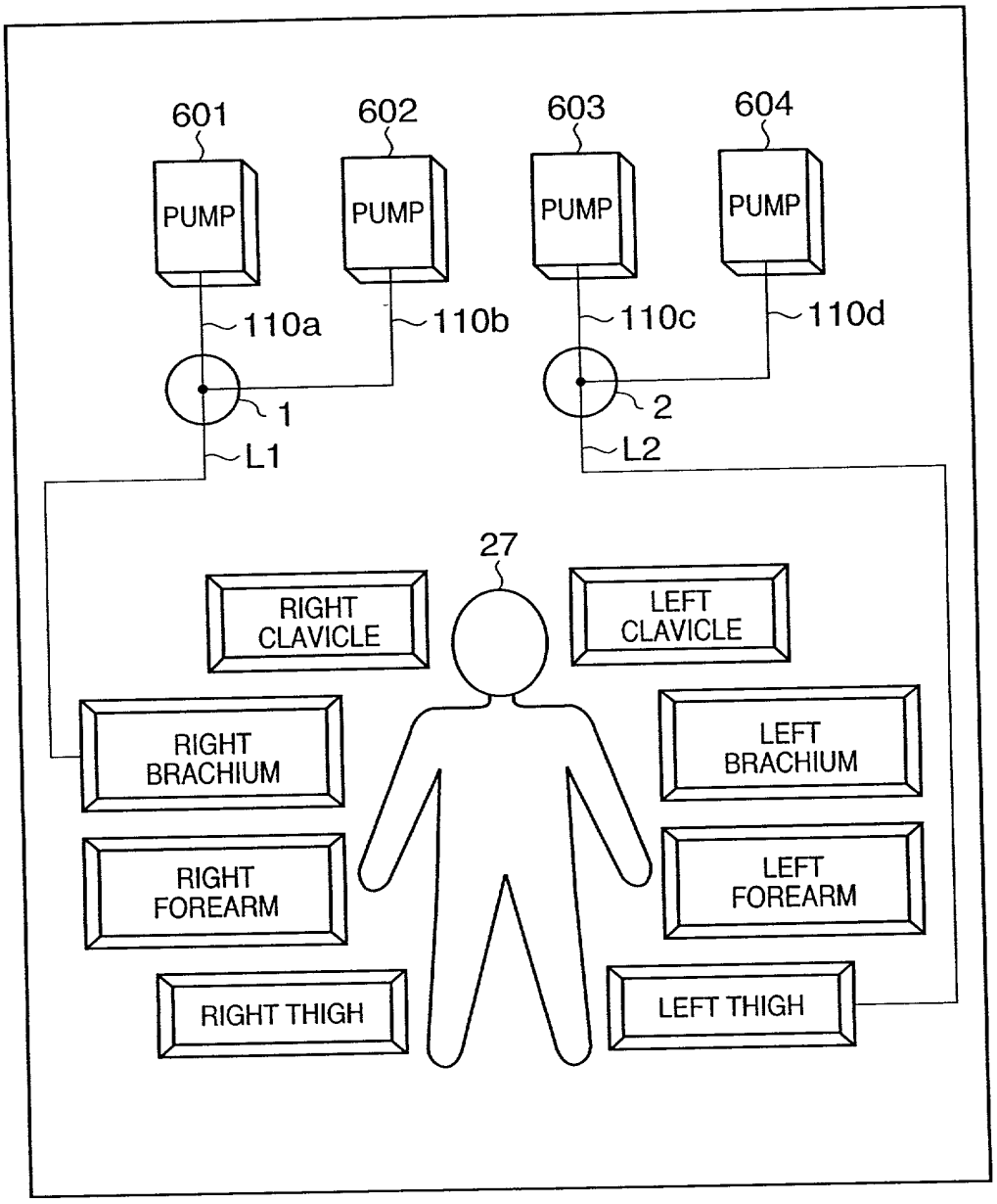

601
602
603
604
PUMP
PUMP
PUMP
PUMP
110a
110b
110c
110d
1
2
L1
L2
27
RIGHT CLAVICLE
LEFT CLAVICLE
RIGHT BRACHIUM
LEFT BRACHIUM
RIGHT FOREARM
LEFT FOREARM
RIGHT THIGH
LEFT THIGH

FIG. 7G

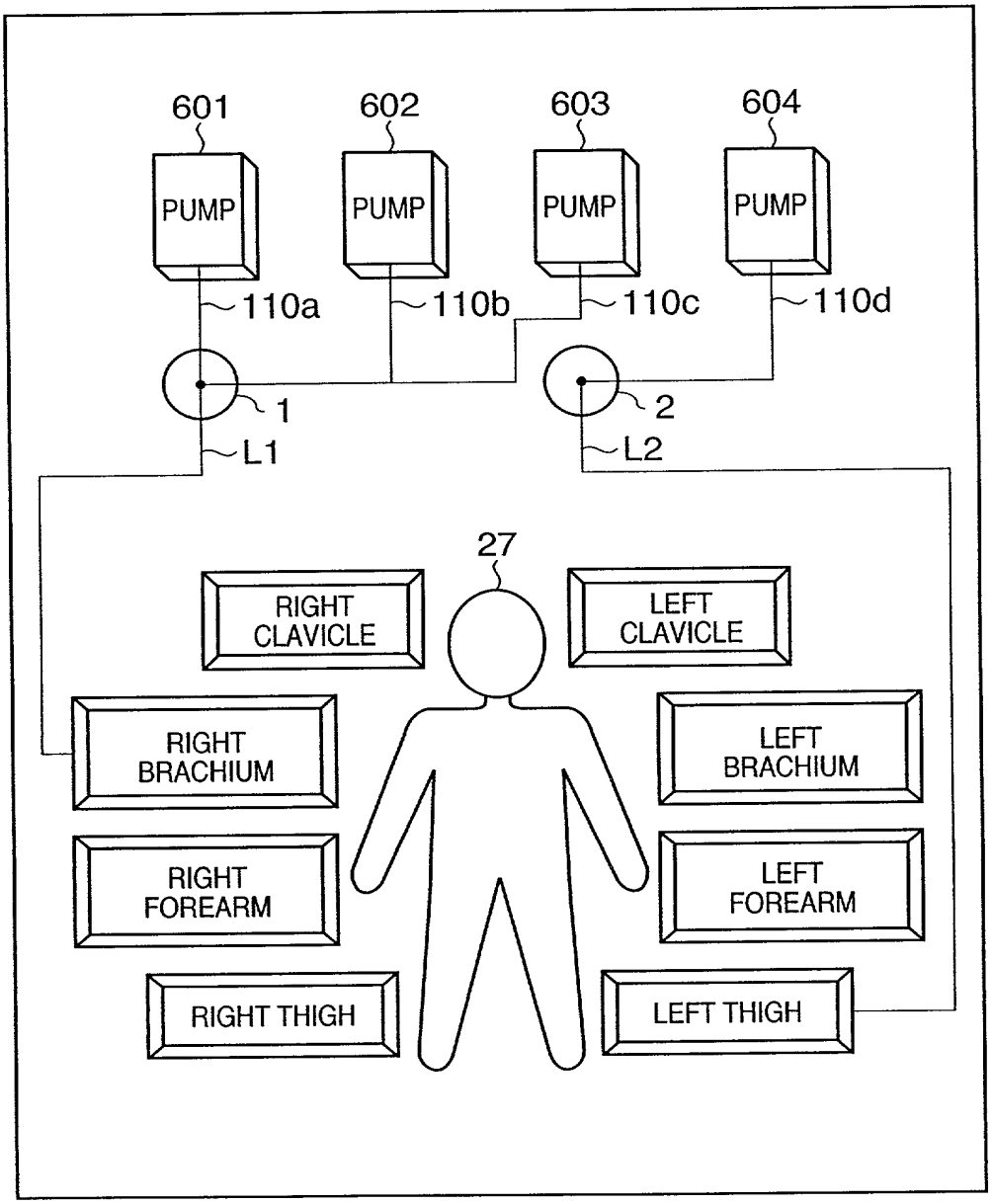

601
602
603
604
PUMP
PUMP
PUMP
PUMP
110a
110b
110c
110d
1
2
L1
L2
27
RIGHT CLAVICLE
LEFT CLAVICLE
RIGHT BRACHIUM
LEFT BRACHIUM
RIGHT FOREARM
LEFT FOREARM
RIGHT THIGH
LEFT THIGH

FIG. 8

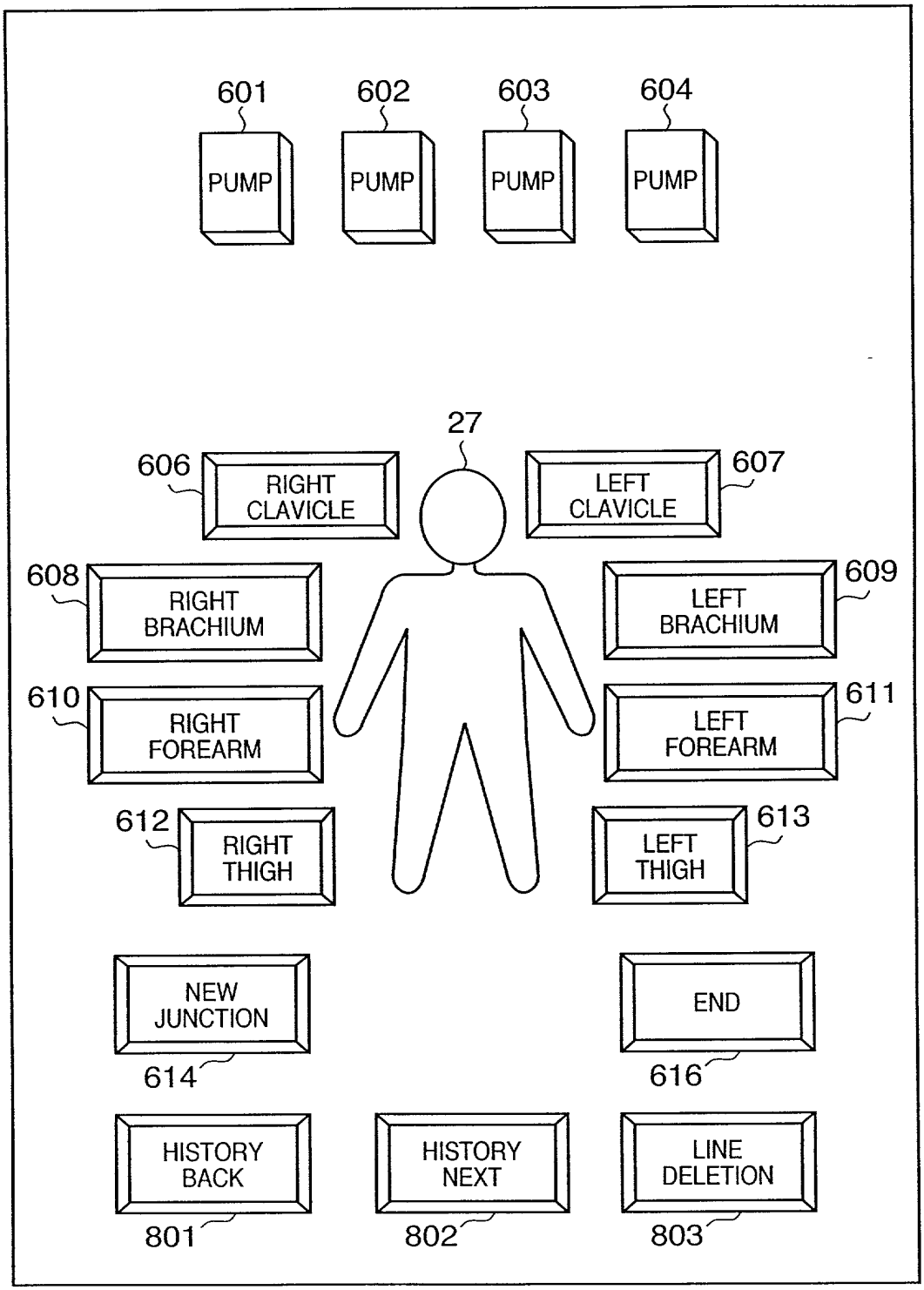

601
602
603
604
PUMP
PUMP
PUMP
PUMP
27
606
RIGHT CLAVICLE
LEFT CLAVICLE
607
608
RIGHT BRACHIUM
LEFT BRACHIUM
609
610
RIGHT FOREARM
LEFT FOREARM
611
612
RIGHT THIGH
LEFT THIGH
613
NEW JUNCTION
614
END
616
HISTORY BACK
801
HISTORY NEXT
802
LINE DELETION
803

FIG. 9

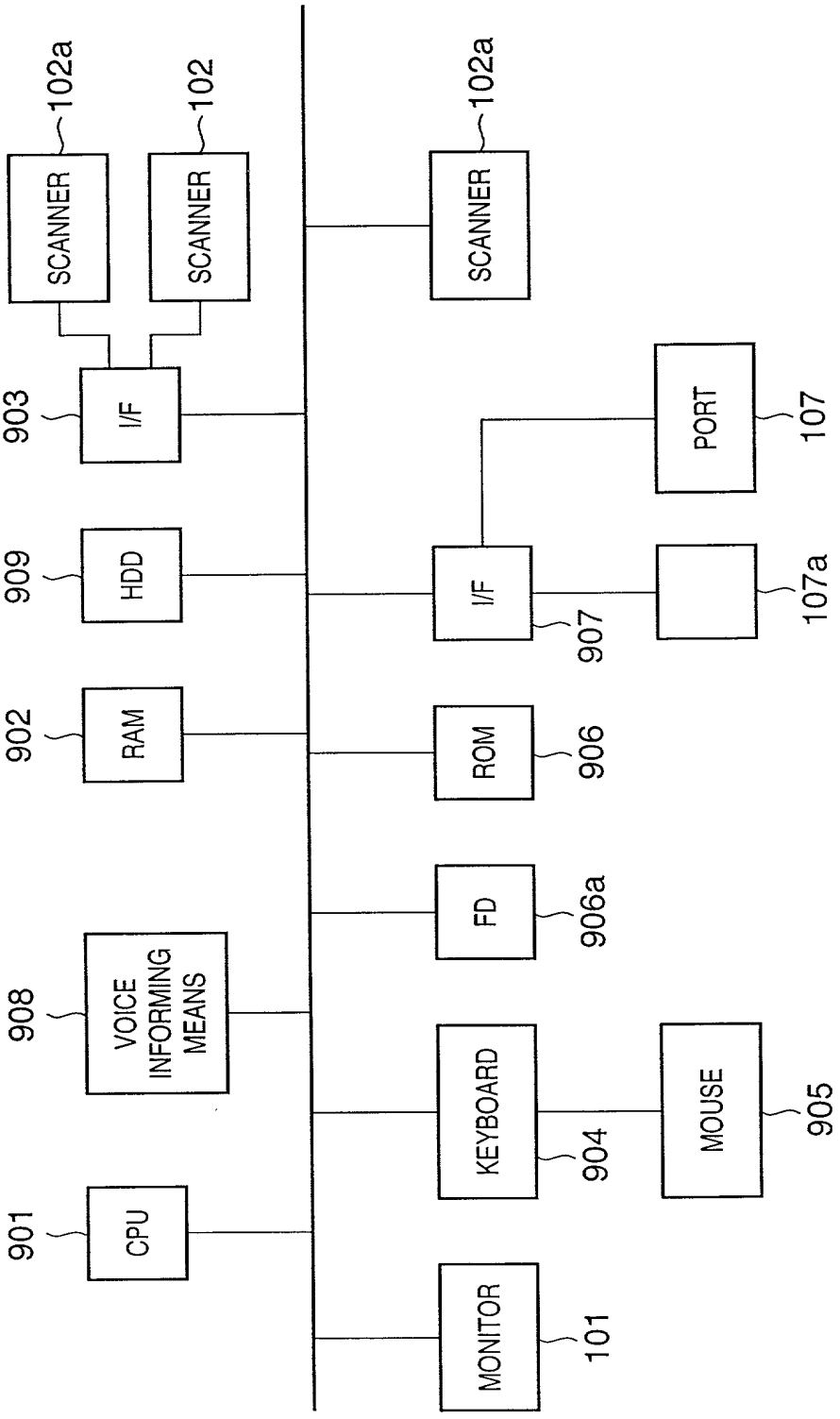

SCANNER
102a
SCANNER
102
SCANNER
102a
903
I/F
PORT
107
909
HDD
I/F
907
107a
902
RAM
ROM
906
908
VOICE INFORMING MEANS
FD
906a
901
CPU
KEYBOARD
904
MOUSE
905
MONITOR
101

FIG. 10A

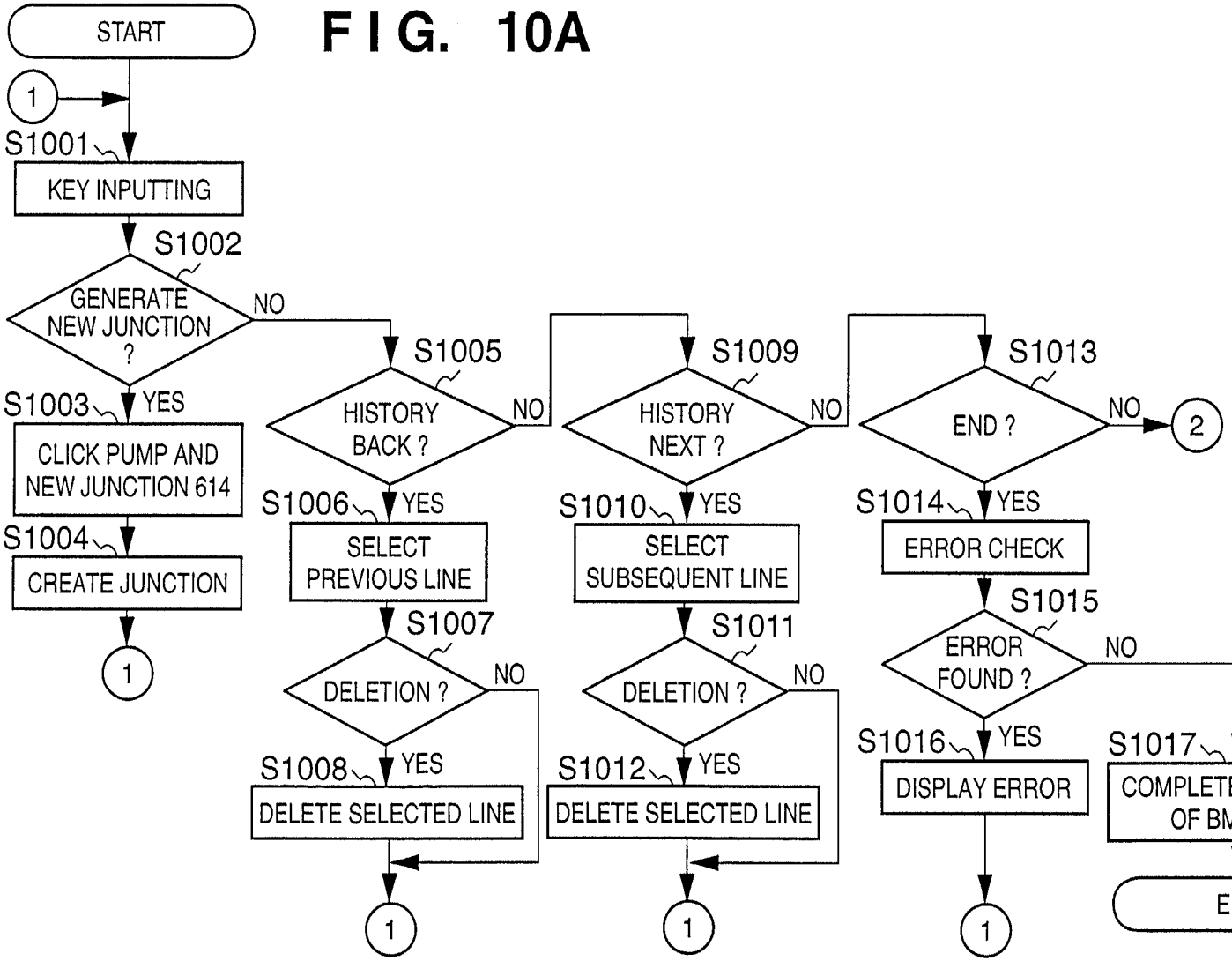


FIG. 10B

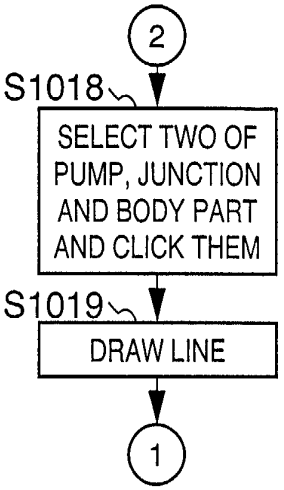


FIG. 11

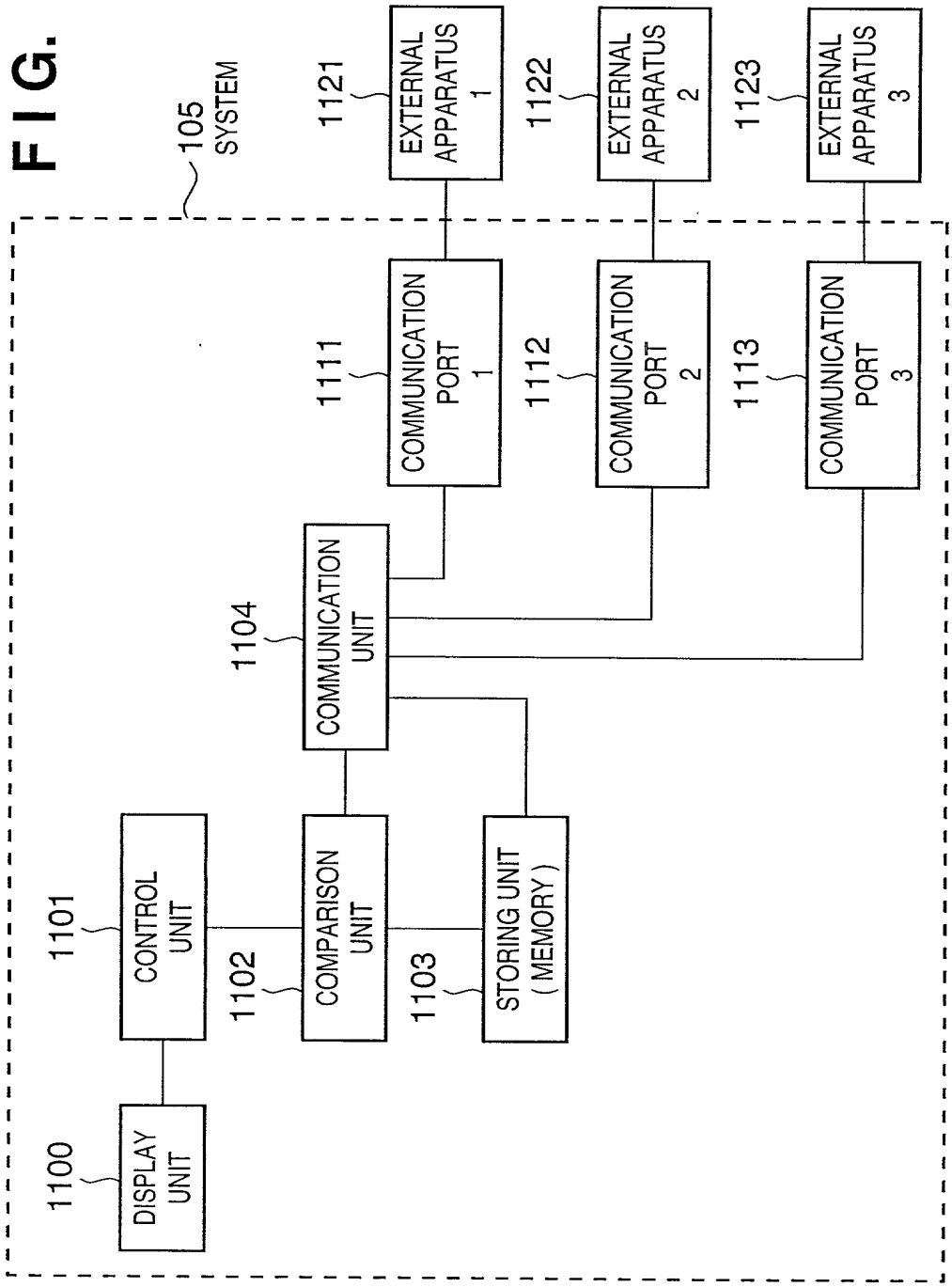

105
SYSTEM
1100
DISPLAY UNIT
1101
CONTROL UNIT
1102
COMPARISON UNIT
1103
STORING UNIT (MEMORY)
1104
COMMUNICATION UNIT
1111
COMMUNICATION PORT 1
1112
COMMUNICATION PORT 2
1113
COMMUNICATION PORT 3
1121
EXTERNAL APPARATUS 1
1122
EXTERNAL APPARATUS 2
1123
EXTERNAL APPARATUS 3

FIG. 12

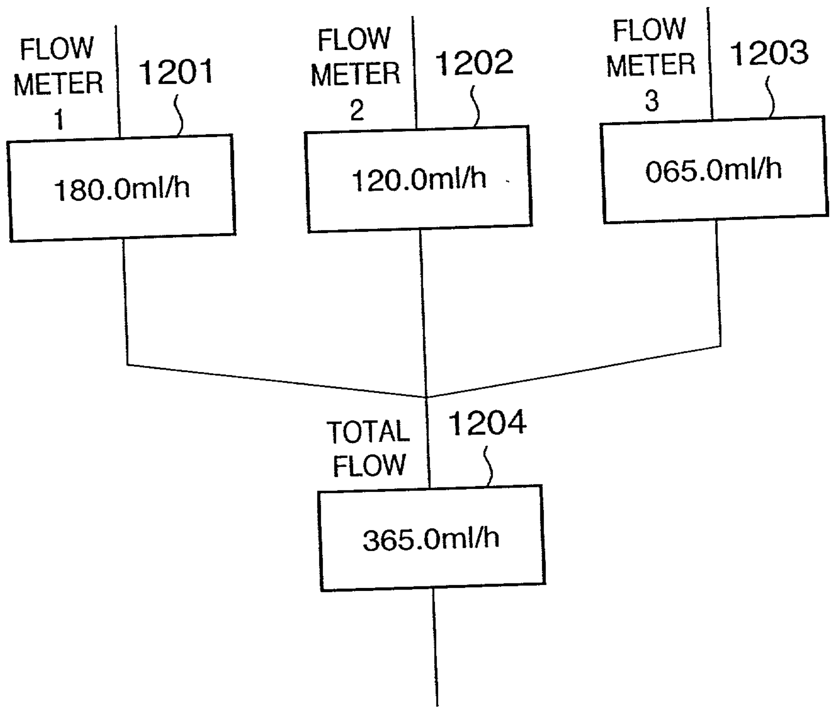

FLOW METER 1
1201
180.0ml/h
FLOW METER 2
1202
120.0ml/h
FLOW METER 3
1203
065.0ml/h
TOTAL FLOW
1204
365.0ml/h

FIG. 13

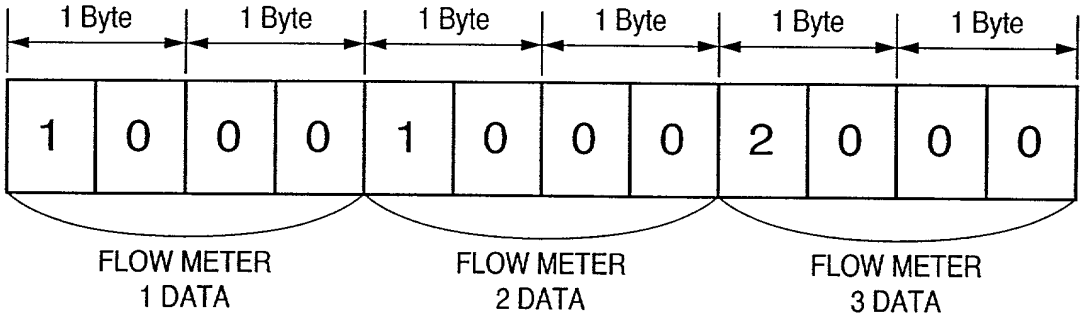

1 Byte
1 Byte
1 Byte
1 Byte
1 Byte
1 Byte
1 0 0 0 1 0 0 0 2 0 0 0
FLOW METER 1 DATA
FLOW METER 2 DATA
FLOW METER 3 DATA

FIG. 14

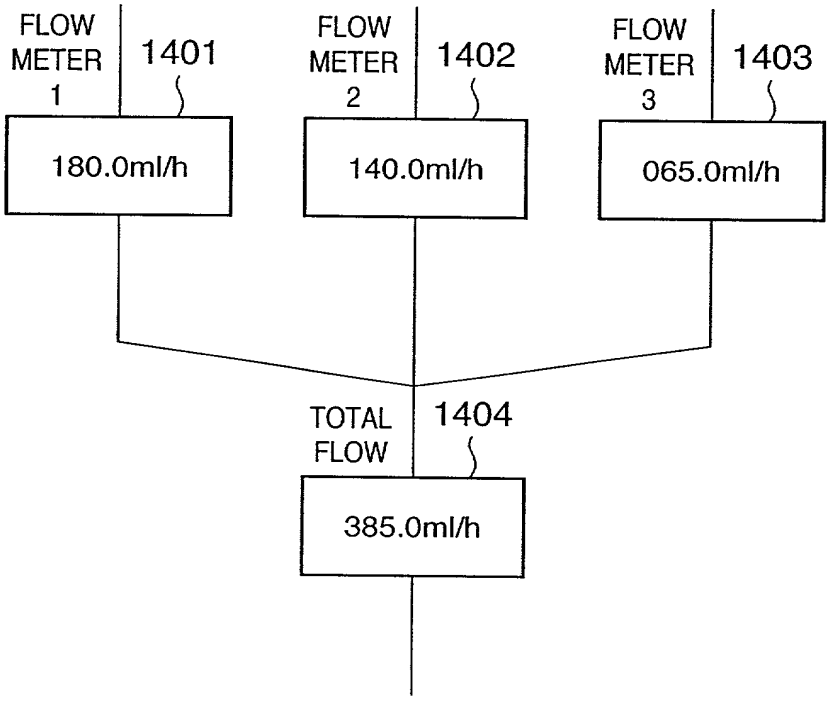
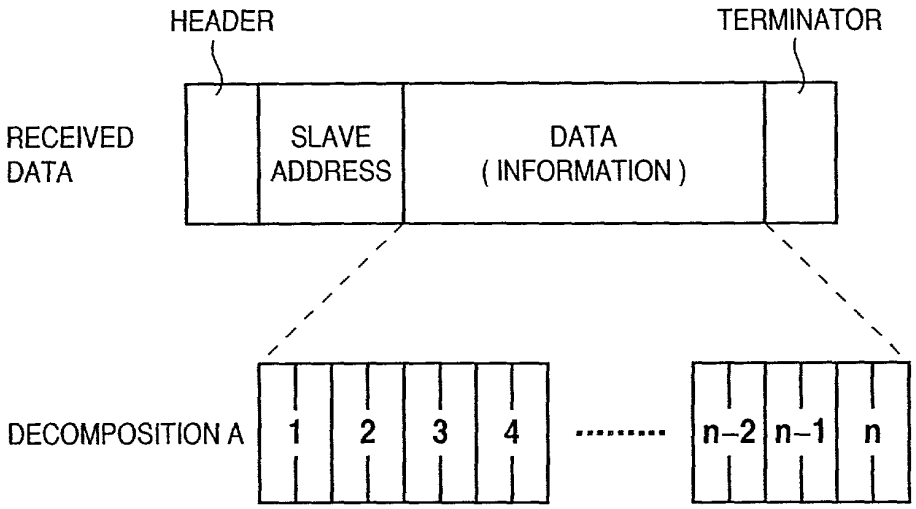

FLOW METER 1
1401
180.0ml/h
FLOW METER 2
1402
140.0ml/h
FLOW METER 3
1403
065.0ml/h
TOTAL FLOW
1404
385.0ml/h

FIG. 15

CALCULATION OF INVERSE BCC



DECOMPOSITION B = INVERSE (DECOMPOSITION A)

$$BCC1 = 1 \forall 2 \forall 3 \forall 4 \cdots \forall n$$

$$BCC2 = \overline{1} + \overline{2} + \overline{3} + \overline{4} \cdots + \overline{n}$$

LOWER TWO BYTES ARE USED

FIG. 16

MEMORY MAP

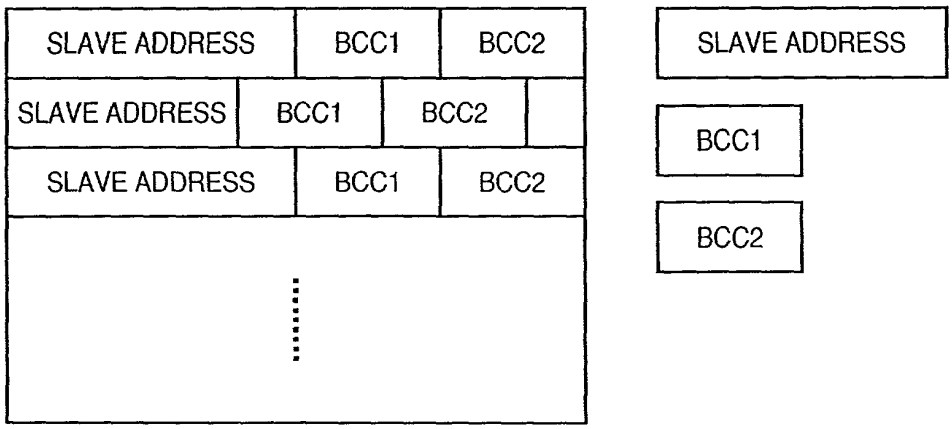


FIG. 17

MECHANISM OF HIGH SPEED

· INVERSE BCC CHECK MODE

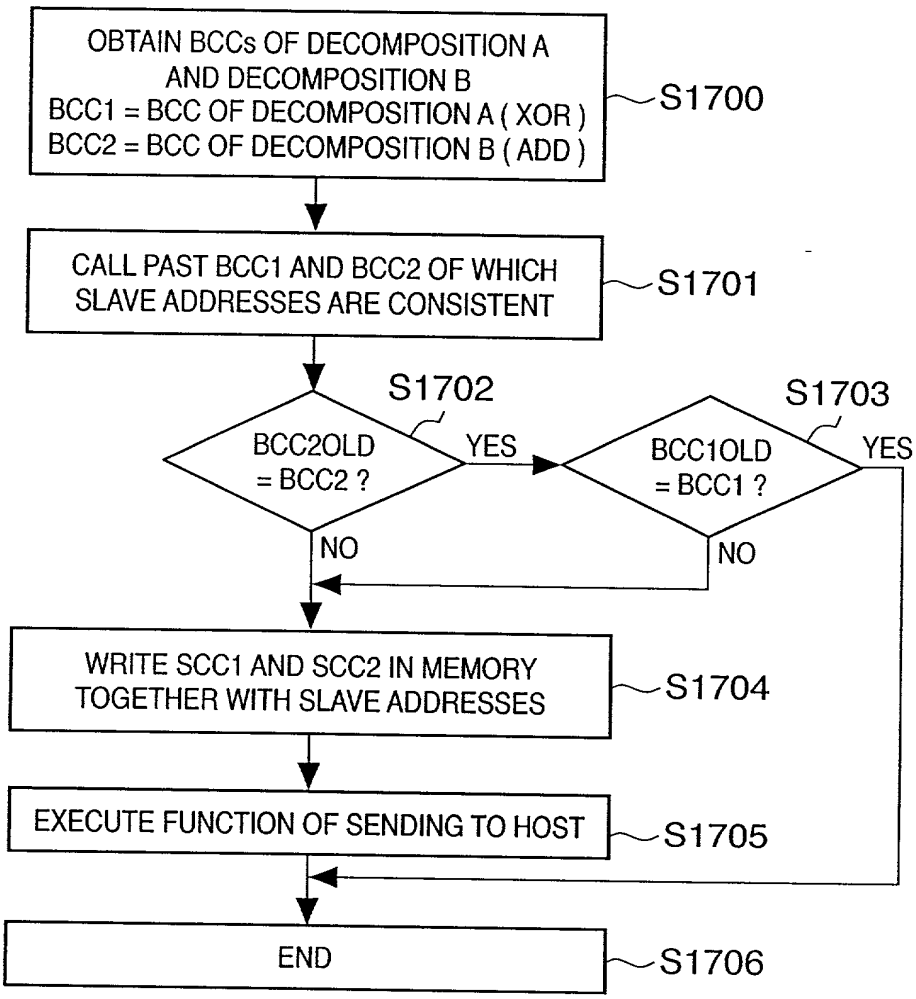
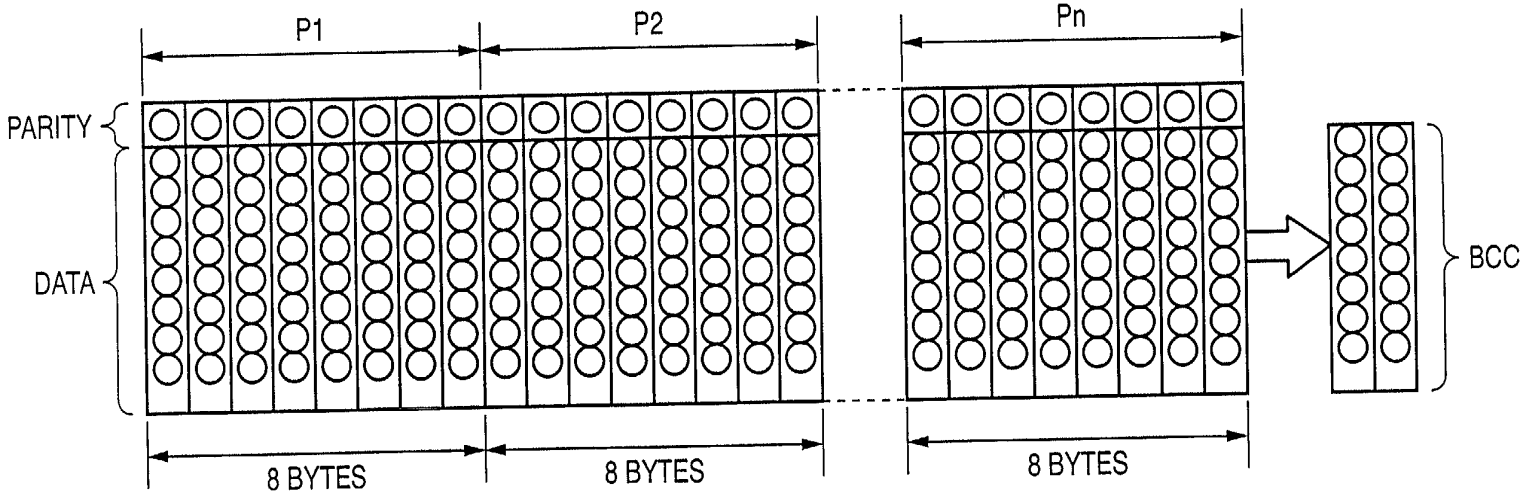


FIG. 18

METHOD OF DETECTING POSITION OF CHANGE



PARITY : 1 BIT FOR CONFIRMING THE NUMBER OF BITS FOR EACH ONE BYTE OF DATA AND MAKING AN ADJUSTMENT SO THAT THE TOTAL THEREOF IS ODD OR EVEN NUMBER

Pn : PARITY PUT TOGETHER FOR EACH EIGHT BYTES OF DATA

THE POSITION OF CHANGED DATA CAN BE CONFIRMED BY COMPARISON OF Pn

FIG. 19

MEMORY MAP

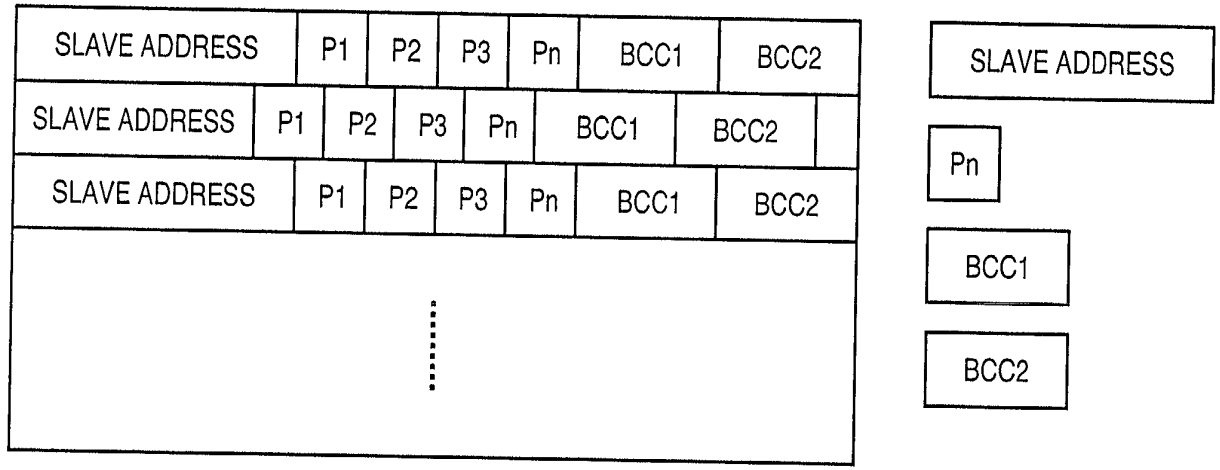


FIG. 20

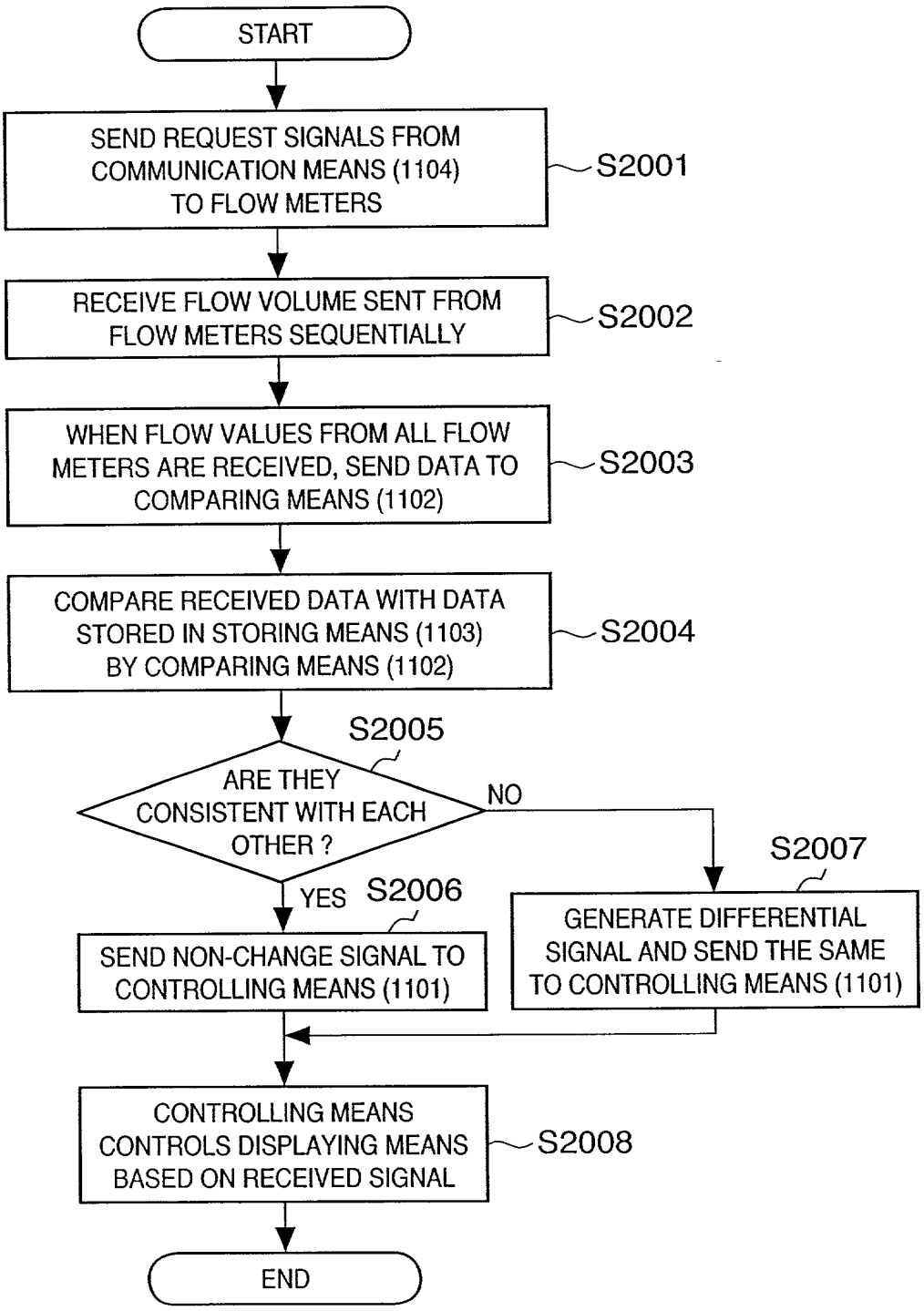

START
SEND REQUEST SIGNALS FROM COMMUNICATION MEANS (1104) TO FLOW METERS
S2001
RECEIVE FLOW VOLUME SENT FROM FLOW METERS SEQUENTIALLY
S2002
WHEN FLOW VALUES FROM ALL FLOW METERS ARE RECEIVED, SEND DATA TO COMPARING MEANS (1102)
S2003
COMPARE RECEIVED DATA WITH DATA STORED IN STORING MEANS (1103) BY COMPARING MEANS (1102)
S2004
S2005
ARE THEY CONSISTENT WITH EACH OTHER ?
NO
YES
S2006
SEND NON-CHANGE SIGNAL TO CONTROLLING MEANS (1101)
S2007
GENERATE DIFFERENTIAL SIGNAL AND SEND THE SAME TO CONTROLLING MEANS (1101)
CONTROLLING MEANS CONTROLS DISPLAYING MEANS BASED ON RECEIVED SIGNAL
S2008
END

FIG. 21A

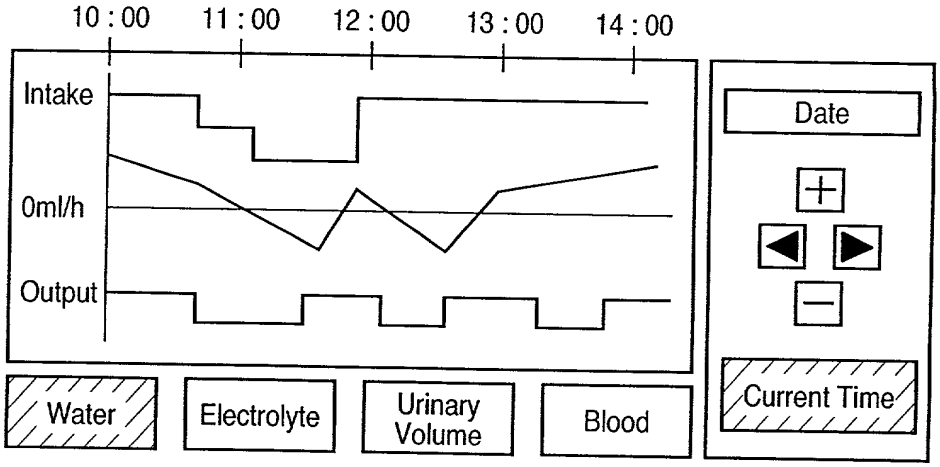


FIG. 21B

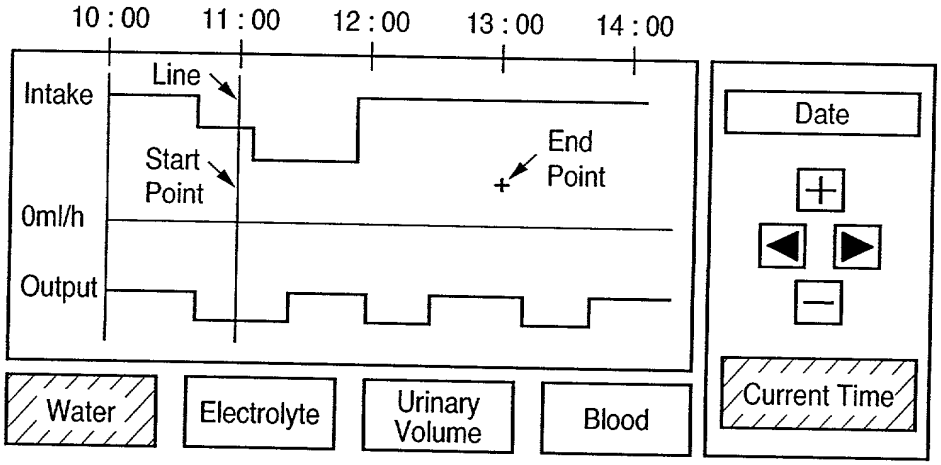


FIG. 21C

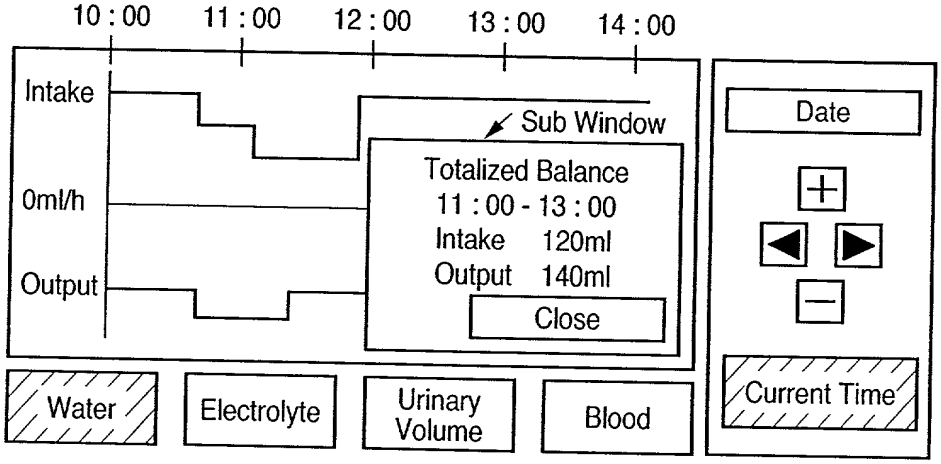


FIG. 22A

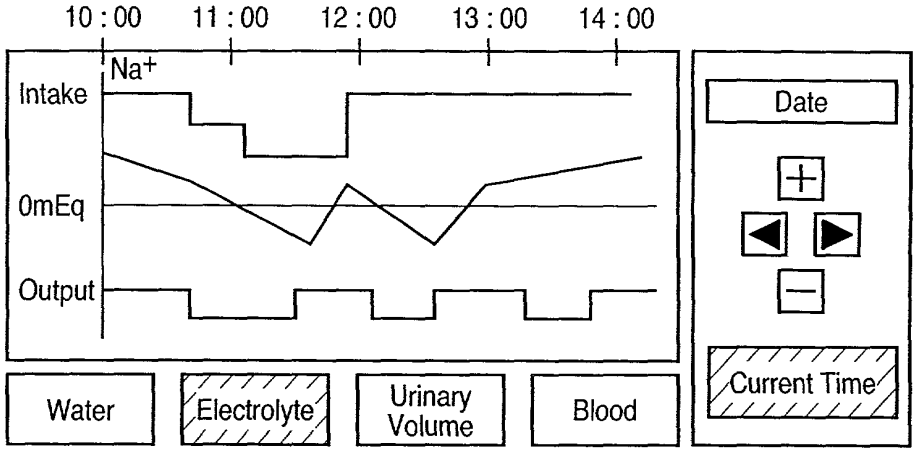


FIG. 22B

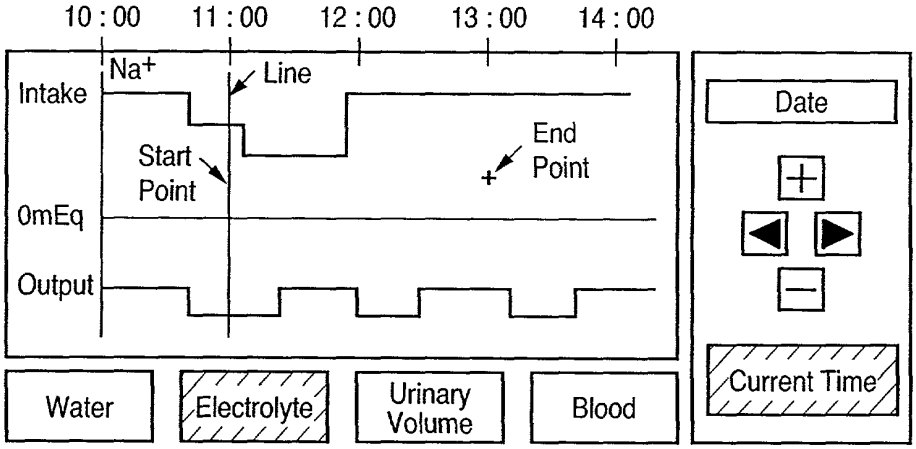


FIG. 22C